

WIECZOREK, J.

"Warsaw Voivodeship Office Struggles for the December Market Supply."
p. 24, (GOSPODARKA RYBNA, Vol. 6, No.2, Feb. 1954. Warszawa, Poland.)

SO; Monthly List of East European Accession, (EEAL), LC,
Vol. 3, No. 12, Dec. 1954, Uncl.

WIECZOREK, J.

"We Should Increase the Fishing of Flounder." p. 25, (GOSPODARKA RYBNA,
Vol. 6, No. 2, Feb. 1954. Warszawa, Poland.)

SO: Monthly List of East European Accession, (EEAL), LC,
Vol. 3, No. 12, Dec. 1954, Uncl.

WIECZOREK, J.

"Conference of Leading Rationalizers of the Fish Industry." p. 25,
(GOSPODARKA RYBNA, Vol. 6, No. 2, Feb. 1954. Warszawa, Poland.)

SO: Monthly List of East European Accession, (EEAL), LC,
Vol. 3, No. 12, Dec. 1954, Uncl.

WIECZOREK, J.

"Results of Sea Fishing in 1953." p. 26, (GOSPODARKA RYBNA, Vol. 6,
No. 2, Feb. 1954. Warszawa, Poland.)

SO: Monthly List of East European Accession, (SEAL), LC,
Vol. 3, No. 12, Dec. 1954, Uncl.

WIECZOREK, Jan Sylwester; TALIK, Tadeusz

Preparation and some reactions of 3-bromo-4,5-diaminopyridine.
Rocz chemii 36 no.5:967-970 '62.

1. Katedra Chemii Organicznej I, Politechnika, Wrocław, i
Katedra Chemii, Zakład Chemii Organicznej, Wyższa Szkoła
Ekonomiczna, Wrocław.

KRZYWY, Tadeusz; SZERSZEN, Leszek; WIECZOREK, Jadwiga

Occurrence of actinomycetes in Spitsbergen in relation to ecologic factors. Arch.immun.ter.dosw. 9 no.2:253-260 '61.

1. Department of Antibiotics, Institute of Immunology and Experimental Therapy, Polish Academy of Sciences, Wrocław, and Chair of Soil Science, Agricultural High School, Wrocław.

(ACTINOMYCES) (SOIL microbiol)

WIECZOREK, Jadwiga

The Actinomycetes of Spitsbergen. II. Production of antibiotics in subsurface cultures. Arch. immun. ter. dosw. 9 no.4:697-704 '61.

1. Department of Antibiotics, Institute of Immunology and Experimental Therapy, Polish Academy of Sciences, Wroclaw.

(ANTIBIOTICS) (ACTINOMYCES)

WIECZOREK, J.S. mgr.inz.

Problems of the young scientific cadres. Przegl techn 81 no.16:
17-18 Ap '60.

KANSY, Jerzy; WIECZOREK, Jerzy

Skull depression in a newborn infant delivered by cesarean section. *Pediat. Pol.* 40 no.3:305-307 Mr '65.

1. Z Kliniki Położnictwa i Chorob Kobiecth Centralnego Szpitala Klinicznego Wojskowej Akademii Medycznej w Łodzi (Kierownik: doc. dr. med. J. Higier) i z Kliniki Chirurgicznej Instytutu Matki i Dziecka (Kierownik: prof. dr. med. W. Poradowska; Dyrektor: prof. dr. med. B. Gornicki).

WIECZOREK, Jerzy

Duplication of the digestive system. *Pediat. Pol.* 39 no.7:
815-821 Jo '64.

1. Z Kliniki Chirurgicznej (Kierownik: prof. dr med. W.
Poradowska) i z Zakładu Radiologii (Kierownik: doc. dr med. S.
Kubicz) Instytutu Matki i Dziecka w Warszawie (Dyrektor: prof.
dr med. B. Gornicki).

RUSZCZEWSKI, Zygmunt; ZAWADZKI, Ryszard; GRYNSZTAJN, Adam; KAPUSCINSKA,
Wanda; RUWINSKI, Bohdan; WIECZOREK, Mirosław; SZOZDA, Mieczysław

Anatomic and pathologic studies on the effect of cotton dust on the
respiratory tract. Polski tygod. lek. 9 no.50:1602-1604 13 Dec 54.

1. Z Zakładu Anatomii Patologicznej A.M.w Lodz; kierownik: prof.
dr A.Pruszczyński.

(RESPIRATORY TRACT, physiology,

eff. of cotton dust, autopsy findings in subjects
exposed to dust)

(DUST,

cotton dust, eff. on resp. tract, autopsy findings in
subjects exposed to dust)

(COTTON,

cotton dust, eff. on resp. tract, autopsy findings in
subjects exposed to dust)

WIECZOREK, M

KOZLOWSKI, Henryk; MALDYK, Eugeniusz; SZENDZIKOWSKI, Stefan; WIECZOREK, Mirosław

Histological changes in the intrapulmonary blood vessels & aorta during fibrocavernous pulmonary tuberculosis. Gruzlica 25 no.3:181-188 Mar 57.

1. Z Zakładu Anatomii Patologicznej A.M. w Łodzi Kierownik: prof. dr med. A. Pruszczyński. Adres: Łódź, ul. Sedziowska 18.

(TUBERCULOSIS, PULMONARY, pathol.

aorta & intrapulm. blood vessels, histopathol. in fibrocavernous tuberc. (Pol))

(AORTA, pathol.

histopathol. in fibrocavernous pulm. tuberc. (Pol))

(LUNGS, blood supply

histopathol. of intrapulm. vessels in fibrocavernous pulm. tuberc. (Pol))

SROCZYNSKI, Jan; WINCZOREK, Mirosław

Anatomo-pathological studies in rabbits in acute lead poisoning.
Postery hig.med.dow. 13 no.6:759-763 '59.
(LEAD POISONING pathol)

ADAMKIEWICZ, Kazimierz; WIECZOREK, Mirosław; CZOPIK, Jerzy; MUSIEROWICZ,
Andrzej; ZIELINSKI, Jerzy

Effect of decapsulation and enveloping the kidney in the omentum on
the development of collateral vascularization. Pol. tyg. lek. 17 no.6:
206-209 5 F '62.

1. Z II Kliniki Chirurgicznej Szl. AM w Zabrze; kierownik: prof. dr
med. J. Gasinski i z Zakładu Anatomii Patologicznej Szl. AM w Zabrze;
kierownik: prof. dr med. W. Niepolomski.

(KIDNEYS blood supply) (OMENTUM physiol)

WIECZOREK, Mirosław; SROCZYNSKI, Jan

Anatomical and pathological studies in experimental chronic lead poisoning in rabbits. Postepy hig.med.dosw.17 no.5:595-601
S-0'63

1. Z Zakładu Anatomii Patologicznej Śląskiej AM ;(kierownik: prof.dr. W.Niepolomski) i z II Kliniki Chorob Wewnętrznych Śląskiej AM w Zabrze-Rokitnicy (kierownik: prof.dr.W.Zahorski).

*

ADAMKIEWICZ, Kazimierz; GINKO, Tadeusz; GRZBIELA, Jacek; WIECZOREK,
Mirosław

Substitution of ureteral defects with autologous ureteral grafts.
Pol. przegl. chir. 36 no.4a;Suppl.:467-479 Ap '64.

1. Z II Kliniki Chirurgicznej Śląskiej Akademii Medycznej
w Zabrze (Kierownik: prof. dr J. Gasinski) i z Zakładu
Anatomii Patologicznej Śl. Akademii Medycznej w Zabrze
(Kierownik: prof. dr W. Niepołomski).

WIECZOREK, Mirosław

Tanninophilic proteins in cancer cells. Pat. Pol. 16 no.3:
257-266 JI-S ' 65.

1. Z Zakładu Anatomii Patologicznej Śląskiej AM w Zabrze
(Kierownik: prof. dr. med. W. Niepolomski).

CZYZEWSKI, Kazimierz; GORKA, Zygmunt; SOSNIERZ, Marian; WIECZOREK,
Miroslaw

Clinical and histological aspects of bronchial carcinoma in
own material. Gruzlica 33 no.1:13-20 Ja '65.

1. Z I Kliniki Chirurgii Slaskiej Akademii Medycznej (Kierownik: prof. dr. med. S. Szyszko) i z Zakladu Anatomii Patologicznej Slaskiej Akademii Medycznej w Zabrze (Kierownik: prof. dr. med. W. Niepolomski).

Wieczorek, Oswald

POLAND / Chemical Technology, Chemical Products and Their
Application, Part 3. - Treatment of Solid Combustible
Minerals.

H-21

Abs Jour : Ref. Zhur. Khimiya, No 4, 1958, 12455.

Author : Jozef Kula, Oswald Wieczorek.

Inst : Not given.

Title : Chlorine in Tar and in Its Distillation Products.

Orig Pub : Koks, smola, gaz, 1957, 2, No 1, 32 - 33.

Abstract : The analytical determination of Cl contents in samples
of raw tar from Polish by-product-coke works and in products
of fractional distillation of these tars was carried out;
a tentative balance of Cl distribution among the distilla-
tion products was made and it was shown that only 1/3 to 2/3
of chlorine contained in tar passed into pitch and that the

Card 1/2

WIECZOREK, P.

Chinese shipbuilding industry. p.7

PRZEGLAD TECHNICZNY. (Naczelan Organizacja Techniczna) Warszawa, Poland
Vol.80, no.50, Dec. 1959

Monthly list of East European Accessions (EEAI) LC, Vol.9, no.1, Jan. 1960

Uncl.

POMIANOWSKI, Andrzej, mgr inz.; WIECZOREK, Stanislaw, mgr inz.

High- power short circuit laboratory of the Power Institute.
Energetyka Pol 18 no.4: Supplement: biul inst energetyki 6
no.3/4:9-11 Ap'64

WIECZOREK, Tadeusz

American clubs of agricultural youth and the Agricultural
Preparation Corps in Poland. Postepy nauk roln 11 no.4:133-
144 J1-Ag '64.

1. Department of Pedagogy of the Central College of
Agriculture, Warsaw.

~~WIECZOREK, Zbigniew~~

SKURSKI, Adam; KAPINSKA, Eugenia; WIECZOREK, Zbigniew

Behavior of BCG strains of various origin in phagocytic reaction
in vitro. Arch. immun. ter. dosw. 5:21-35 1957.

1. Instytut Immunologii i Terapii Doswiadczałnej PAN we Wrocławiu
(Dyrektor: prof. dr. St. Slopek) Dział Bakteriologii i Antybiotyków
(Kierownik: prof. dr. St. Slopek)

(BCG VACCINATION

behavior of BCG strains of various origin in phagocytic
reaction in vitro (Pol))

SKURSKI, Adam; KAPINSKA, Eugenia; WIECZOREK, Zbigniew; NORDARSKA, Halina

Phagocytosis of virulent & avirulent acid-fast tuberculosis bacilli
in vitro. Arch. immun. ter. doaw. 5:37-57 1957.

1. Instytut Immunologii i Terapii Doswiadczalnej PAN we Wroclawiu
(Dyrektor: prof. dr St. Slopek). Dzial Bakteriologii i Antybiotykow
(Kierownik: prof. dr. St. Slopek)

(MYCOBACTERIUM TUBERCULOSIS

phagocytosis of virulent & avirulent acid-fast
tuberc. bacilli in vitro (Pol))

LISOWSKI, Jozef, WIECZOREK, Zbigniew, SKURSKI, Adam

Effect of thiol compounds on bacterial phagocytosis in vitro. Postepy
hig.med.dosw. 12 no.1:93-94 1958

1. Instytut Immunologii i Terapii Doswiadczałnej PAN im. Ludwika
Hirszfelda. Dział Biochemii i Dział Bakteriologii i Antybiotyków.
Adres: Wrocław, ul. Chalubinskiego 4.

(ACETIC ACID, related cpds.

mercaptoacetic acid, eff. on phagocytosis in vitro (Pol))

(DIMERCAPROL, effects,

on phagocytosis in vitro (Pol))

(PHAGOCYTOSIS, effect of drugs on,

BAL & mercaptoacetic acid, in vitro (Pol))

KANTOCH, Miroslaw, SKURSKI, Adam, WIECZOREK, Zbigniew

Inhibition of phagocytosis in vitro with the aid of bacteriophages.
Postepy hig. med. dosw. 12 no.1:95-96 1958

1. Instytut Immunologii i Terapii Doswiadczałnej PAN im. Ludwika
Hirszefelda. Dział Wirusologii i Dział Bakteriologii i Antybiotyków.
Adres: Wrocław, ul. Chalubinskiego 4)

(PHAGOCYTOSIS,
inhib.by bacteriophages in vitro (Pol))
(BACTERIOPHAGES,
phagocytosis inhib. in vitro (Pol))

WIECZOREK, Zbigniew

Isolation and physico-chemical properties of a tuberculostatic factor from the bulbs of solanum tuberosum. Arch.immun.ter.dosw. 9 no.2: 171-195 '61.

1. Department of Mycology, Institute of Immunology and Experimental Therapy, Polish Academy of Sciences, Wroclaw.

(ANTITUBERCULAR AGENTS pharmacol)
PLANTS MEDICINAL pharmacol)

WIECZOREK, Zbigniew; SZULGA, Teofil; CZAJKA, Maria

Precipitation of tuberosine from the juice of the potato bulb at various concentrations of hydrogen ions. Arch. immun. ter. dosw. 9 no.4:651-656 '61.

1. Department of Mycology, Institute of Immunology and Experimental Therapy, Polish Academy of Sciences, Wroclaw.

(ANTITUBERCULAR AGENTS chem)

SZULGA, Teofil; WIECZOREK, Zbigniew; MADRA, Janina

Reduction of activity of tuberosine after contact with suspensions of tubercle bacilli of various densities. Arch. immun. ter. dosw. 9 no.4:657-666 '61.

1. Department of Mycology, Institute of Immunology and Experimental Therapy, Polish Academy of Sciences, Wroclaw.

(ANTITUBERCULAR AGENTS pharmacol)
(MYCOBACTERIUM TUBERCULOSIS pharmacol)

WIECZOREK, Zbigniew; SZULGA, Teofil

Electrophoretic separation of tuberosine. Arch. immun. ter. dosw. 9
no.4:667-671 '61.

1. Department of Mycology, Institute of Immunology and Experimental
Therapy, Polish Academy of Sciences, Wroclaw.

(ANTITUBERCULAR AGENTS chem) (ELECTROPHORESIS)

SZULGA, Teofil; WIECZOREK, Zbigniew; MADRA, Janina; CZARNECKA, Teresa

Studies of the inactivation of tuberosine by sera of various species.
Arch. immun. ter. dosw. 9 no.4:673-678 '61.

1. Department of Mycology, Institute of Immunology and Experimental
Therapy, Polish Academy of Sciences, Wroclaw.

(ANTITUBERCULAR AGENTS)

MICHALSKA, Eugenia; SKURSKI, Adam; WIECZOREK, Zbigniew

The behavior of opsonizing and agglutinating antibodies in states of immunologic tolerance. Arch. immun. ther. exp. 12 no.6:683-689 '64

1. Department of Mycology, Institute of Immunology and Experimental Therapy, Polish Academy of Sciences, Wroclaw.

MASTALERZ, P.; WIECZOREK, Z.; KOCHMAN, M.

Utilization of carbon-bound phosphorus by microorganisms. Acta
biochim. Pol. 12 no.2:151-156 '65

1. Department of Organic Chemistry, Institute of Technology,
Wroclaw; Department of Mycology, Institute of Immunology
and Experimental Therapy, Polish Academy of Sciences, Wroclaw;
and Department of Physiological Chemistry, Medical School of
Wroclaw.

WIECZOREK, Zbigniew; SKURSKI, Adam; SIEMEK, Ryszard.

The effect of lysozyme on the phagocytosis of tubercle bacilli.
Arch. immun. ther. exp. 13 no.2:197-203 '65

1. Department of Mycology, Institute of Immunology and Experimental
Therapy, Polish Academy of Sciences, Wrocław.

SZULGA, Teofil; WIECZOREK, Zbigniew; MADRA, Janina; KOWALCZYK, Halina

Classification of acid-fast bacilli isolated from the milk of
cows and from sewage used for fertilizing pastures. Pt.3. Arch.
immun. ther. exp. 13 no.3:336-343 '65.

1. Department of Mycology, Institute of Immunology and Experimental
Therapy, Polish Academy of Sciences, Wrocław.

WIECZOREK, Zbigniew; SKURSKI, Adam; SZULGA, Teofil; KEMPA, Bozena;
CZAJKA, Maria

Phagocytosis of atypical mycobacteria from various sources.
Arch. immun. ther. exp. 13 no.1:1-5 '65

Phagocytosis of acid-fast bacilli in the presence of human
and animal sera. Ibid.:6-12

1. Department of Mycology, Institute of Immunology and Ex-
perimental Therapy, Polish Academy of Sciences, Wroclaw.

WIECZORKIEWICZ, A.

Country : POLAND H28
Category : Chemical Technology. Food Industry
Abs. Jour : Ref Zhur-Khimiya, No 14, 1959, No 51472
Author : Wieczorkiewicz, A.
Institute :
Title : Importance of Determining the Adhesiveness in
the Manufacture of Macaroni
Orig Pub. : Przetwor. owoc.-warzy. i koncent., 1958, 2, No
3, 77-79
Abstract : No abstract.

Card: 1/1

H-162

HLINIAK, Irena; VORBRODT, Janina; WIECZORKIEWICZ, Anna; KOZLIK, Ryszard

Statistical analysis of results in the treatment of cervical cancer according to material of the Institute of Oncology in Gliwice during 1947-1952. Nowotwory 11 no.3/4:329-337 '61.

1. Z Instytutu Onkologii -- Oddzial Gliwice Dyrektor: dr med. J. Swiecki.

(CERVIX NEOPLASMS ther)

VORBRDGT, J.; WIECZORKIEWICZ, A.; HLINIAK, I.

Relation of therapeutic methods to results in the treatment of cervical cancer in the Institute of Oncology in Gliwice. Polski przegl. radiol. 25 no.3:475-484, My-Je '61.

1. Z Instytutu Onkologii w Gliwicach Dyrektor: dr med. J. Swiecki.

(CERVIX NEOPLASMS radiother)

WIECZORKIEWICZ, Anna; HLINIAKOWA, Irena; VORBRODTOWA, Janina

Complications following radiotherapy of cervical cancer and effect of general conditions of the patient before therapy on the survival according to material of the Institute of Oncology in Gliwice. Nowotwory 12 no.2:131-138 '62.

1. Z Instytutu Onkologii Oddział w Gliwicach Dyrektor: dr med. J. Swiecki.
(CERVIX NEOPLASMS radiother) (RADIOTHERAPY compl)

WIECZORKIEWICZ, Anna; WOZNIAKOWSKA, Zofia

Evaluation of preventive oncological examinations according to data of the Regional Oncological Clinical in Gliwice. Polski tygod. lek. 17 no.25:990-996 18 Ja '62.

1. Z Instytutu Onkologii w Gliwicach, dyrektor: dr med. J. Swiecki i Wojewodzkiej Przychodni Onkologicznej w Gliwicach; dyrektor: lek. med. A. Wieszorkiewicz.

(NEOPLASMS prev & control)

WIECZORKIEWICZ, Anna

Treatment of Wilms' tumor according to data of the Institute of
Oncology in Gliwice. Polski przegl. chir. 34 no.6a:623-628 '62.

1. Z Instytutu Onkologii w Gliwicach Dyrektor: dr J. Swiecki.
(NEPHROBLASTOMA surg)

KUSNIERCZYK, Wacław; WIECZORKIEWICZ, Anna; VORERODT, Janina

Attempted prevention of excessive reactions to radiation in the treatment of laryngeal cancer with roentgen rays. Nowotwory 13 no.4:341-346 O-D'63.

1. Z Kliniki ORL Sl. AM w Zabrze (kierownik: prof. dr.med. T.Ceypek) i Instytutu Onkologii w Gliwicach (dyrektor: dr. med. J.Swiecki).

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POLAND

WIECZORKIEWICZ, Anna, SCHNEIBERG, Krzysztof, and ZARENBA, Barbara; Institute of Oncology (Instytut Onkologii) in Gliwice (Director: Dr. med. Jeremi SWIECKI)

"Some Problems of Therapy of Malignant Diseases of the Lympho-Reticular System."

Warsaw, Polski Tygodnik Lekarski, Vol 18, No 22, 27 May 63, pp 789-792.

Abstract: [Authors' English summary modified] Authors discuss the relationship between leukemia and lymphatic sarcoma and the difficulties of differentiation between a neoplasm and leukemia in the lympho-reticular system. They exemplify the problem by citing three cases, and recommend careful observation during x ray treatment in view of the fact that the existing classification of the malignant diseases of the lympho-reticular system does not include the prognosis. There are 25 references, of which eight (8) are Polish, two (2) German, and the remaining 15 - Western.

1/1

SWIECKI, Jeremi, dr. med.; WIECZORKIEWICZ, Anna; HLINIAK, Andrzej

Combined treatment of microcellular cancer of the lung with
nitrogranulogen and radiotherapy. Pol. hyg. lek. 20 no.5:
174-175 1 F'65.

1. Z Instytutu Onkologii; oddział w Gliwicach (dyrektor: dr.
med. Jeremi Swiecki).

WIECZORKIEWICZ, Z.

KIMMEL, Zbigniew; WIECZORKIEWICZ, Bronisław.

Three cases of congenital obstruction of the esophagus with tracheo-esophageal fistula. Polski przegl.chir. 27 no.5:441-446 May '55.

1. Ze specjalistycznego oddziału chirurgii dziecięcej Szpitala Miejskiego w Gliwicach. Ordynator dr med. Zb. Fabenski. i z Prosektury Szpitala Miejskiego w Gliwicach. Prosektor: lek. Z. Kimmel. I. Gliwice, ul. Długa 21. 2. Gliwice, ul. Zwycięstwa 45, m. 5.

(ESOPHAGUS, abnormalities,

atresia with tracheo-esophageal fistula)

(ESOPHAGUS, fistula,

tracheo-esophageal, in atresia of esophagus)

(ABNORMALITIES,

atresia of esophagus, with tracheo-esophageal fistula)

(TRACHEA, fistula,

tracheo-esophageal, in atresia of esophagus)

(FISTULA,

tracheo-esophageal, in atresia of esophagus)

WIECZORKIEWICZ, BRONISLAW

CYWINSKA, Danuta; OCHARSKA, Janina; WIECZORKIEWICZ, Bronislaw

Treatment of scalds in children with discussion on treatment
by the open method. Polski tygod. lek. 12 no.10:348-351
4 Mar 57.

1. (Z Oddzialu Chirurgii Dzieciecej Szpitala Miejskiego w
Gliwicach; ordynator: dr. med. Zbigniew Tabenski). Adres:
Gliwice, ul. Kosciuszki 29, Szpital Miejski, Oddz. Chir.
Dziec.

(BURNS, in inf. & child
scalds, ther., open method (Pol))

TABENSKI, Zbigniew, PLEWINSKA, Teresa, WIECZORKIEWICZ, Bronislaw

Prevention of congenital luxation of the hip, on the basis of material
from the Children's Surgery Ward in Gliwice. Polski, tygod.lek.
13 no.10:351-354 10 Mar 58

1. Z oddziału chirurgii dziecięcej Szpitala Miejskiego w Gliwicach
ordynator: Zbigniew Tabenski.
(HIP, disloc.
congen., prev. (Pol))

CYWINSKA, Danuta; WIECZORKIEWICZ, Bronislaw

Diagnostic difficulties in acute appendicitis in infants. *Pediat.*
polaka 34 no.9:1173-1178 Sept 59.

1. Z Oddziału Chirurgii Dziecięcej Szpitala Miejskiego w Gliwicach
Ordynator Oddziału: dr med. Zb. Tabenski.
(APPENDICITIS, diag.)

NOWOTNY-ZBOROWSKA, Danuta; WIECZORKIEWICZ, Bronislaw

Preparation of the area for skin grafting in children. Pol.
przegl. chir. 37 no.9:899-901 8 '65.

1. Ze Specjalistycznego Oddzialu Chirurgii Dzieciecej Szpitala
Miejskiego w Gliwicach (Kierownik: doc. dr. Z. Tabenski).

IESZ, Katarzyna; WIECZORKIEWICZ, Helena; LIPIEC, Tadeusz

Indirect complexometric determination of thiocompounds.

I. Determination of thioacetamide (AKT), and thiourea (TM).
Chem anal 6 no.6:1033-1038 '61.

1. Department of Inorganic and Analytical Chemistry, Faculty
of Pharmacy, Academy of Medicine, Lodz.

WIECZORKIEWICZ, Lech, mgr inż.

Development of the production of machines for plastic working
in 1963. Mechanik 36 no.6:270-272 Je '63.

1. Zjednoczenie Przemysłu Obrabiarek i Narzędzi, Warszawa.

WIECZORKOWSKI, J. POL.

Oxyphosphorus compounds of sulfur and selenium. I.
Synthesis of tetraalkyl thiopyrophosphates. By: J. Wieczorkowski (Politechn. Lodz, Poland). Roczniki Chem. 27, 482-484 (1953) (English summary).—Tetraalkyl thiopyrophosphates, $(RO)_4P(O)SP(O)(OR)_4$, may be prepd. by: (1)—condensation of Na O,O -dialkylthiophosphates with dialkyl chlorophosphates or (2)—action of H_2S on dialkyl chlorophosphates in the presence of tertiary amines. Toxicity and anticholinesterase activity of the products were studied. Dialkyl chlorophosphates were prepd. using the method described previously (cf. C.A. 49, 2300c). Na O,O -dialkylthiophosphates were obtained by adding 0.25 mole powd. S in small portions with stirring and outside cooling to a mixt. of 0.2 mole Na dissolved in 60 ml. dry ROH and 0.21 mole dialkyl phosphite in 80 ml. dry Et_2O . Stirring was continued after all the S was added until the mixt. warmed up to room temp. The excess S was filtered and the filtrate was evapd. under reduced pressure at room temp. The cryst. product was washed 3 times with Et_2O and evapd. each time. Di-Et phosphite gave 98% yield (based on Na) crude $(EtO)_2P(O)SNa$ (I), m. 188° (m. 203° from $CHCl_3-Et_2O$). Crude I was used in further syntheses. $(EtO)_2POCl$ (II) (21.5 g.) (0.125 mole) added dropwise with vigorous stirring to a refluxing mixt. of 24 g. (0.125 mole) powd. dry I and 120 ml. anhyd. Et_2O , refluxed for 30 min., dild. with 100 ml. C_6H_6 , washed successively with: 100 ml. water contg. a few drops pyridine, 50 ml. 1% HCl, 50 ml. water, 50 ml. 5% $NaHCO_3$, and 50 ml. water, dried with Na_2SO_4 and distd. twice gave 20 g. (85%) $(EtO)_2P(O)SP(O)(OEt)_2$ (III), b.p. 120-2°, $d_4^{20} = 1.1855$, $n_D^{20} = 1.4400$. Similarly, $(MeO)_2$

BERNARD FISZER

P(O)SNa (IV) and $(\text{MeO})_2\text{POCl}$ gave 21% $(\text{MeO})_2\text{P(O)SP(O)SNa}$ (V), yellow liquid, b. 123-30° (decomps. slightly), $b_{\text{red}} 65-9^\circ$ (bath at 100°), $d_{20} = 1.3349$, $n_D^{20} = 1.4519$. IV and II gave 40% $(\text{MeO})_2\text{P(O)SP(O)SNa}$ (VI), colorless liquid, $b_{\text{red}} 110^\circ$, $d_{20} = 1.2530$, $n_D^{20} = 1.4109$. I and $(\text{BuO})_2\text{POCl}$ gave 57 g. crude product which in a mol. distn. (at 0.001 mm., condenser at 20 min. from liquid surface, distg. at 5 drops/min.) gave the following fractions: (1)—6 g., temp. of liquid 50-83°, $n_D^{20} = 1.4398$; (2)—13.5 g., temp. of liquid 82°, $n_D^{20} = 1.4471$, 10.8% P (calcd. for $(\text{BuO})_2\text{P(O)SP(O)SNa}$ 17.1% P); (3)—27.5 g., temp. of liquid 87°, $n_D^{20} = 1.4416$, 14.5% P; (4)—2.5 g., temp. of liquid 117°, $n_D^{20} = 1.4340$. I and $(\text{PrO})_2\text{POCl}$ (VII) gave 77% $(\text{PrO})_2\text{P(O)SP(O)SNa}$, colorless liquid, $b_{\text{red}} 103.5^\circ$, $d_{20} = 1.1347$, $n_D^{20} = 1.4429$. II (34.5 g., 0.2 mole) was added dropwise with stirring at 10-15° to 70 ml. dry pyridine and a strong stream of H_2S was passed through the stirred and cooled mixt. for 90 min. The pptd. $\text{C}_6\text{H}_5\text{N.HCl}$ was filtered and washed twice with 75 ml. C_6H_6 . The combined filtrates were distd. under reduced pressure and the residue taken up in 100 ml. C_6H_6 , washed successively with 30 ml. 2% HCl , 30 ml. water, 30 ml. 5% NaHCO_3 , and 30 ml. water, dried with Na_2SO_4 , and distd. twice gave 23 g. (74%) III, $b_{\text{red}} 83-4^\circ$. An 85% yield of III was obtained when *N*-methylmorpholine (dild. with C_6H_6) was used instead of pyridine. Similarly, VII and H_2S in pyridine gave 67% $(\text{PrO})_2\text{P(O)SP(O)SNa}$ (VIII), colorless liquid, $b_{\text{red}} 94-5^\circ$, $d_{20} = 1.1076$, $n_D^{20} = 1.4363$; $(\text{iso-PrO})_2\text{POCl}$ gave 70% $(\text{iso-PrO})_2\text{P(O)SP(O)SNa}$ (IX), colorless liquid, $b_{\text{red}} 82-4^\circ$, $d_{20} = 1.0885$, $n_D^{20} = 1.4370$; $(\text{BuO})_2\text{POCl}$ gave 72% $(\text{BuO})_2\text{P(O)SP(O)SNa}$ (X), yellow liquid, $b_{\text{red}} 112-14^\circ$, $d_{20} = 1.0374$, $n_D^{20} = 1.4517$; $(\text{iso-BuO})_2\text{POCl}$ gave 72%

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(*iso*-BuO)₂P(O)SPO(*OBu*-*iso*)₂ (XI), colorless liquid; bp 93-8°, *d*₄²⁰ = 1.0483, *n*_D²⁰ = 1.4463; (MeO)₂POCl (below 5°) gave a sticky, malodorous liquid, insol. in org. solvents, sol. in water. Et₃N (0.25 mole) added dropwise to 0.2 mole di-Et phosphite and 0.5 mole CCl₄ and treated with H₂S with stirring at 5-10° for 3 hrs. gave 85% III. All boiling points are uncor. Tetraalkyl thiopyrophosphates are insecticides. The following doses (in g./kg. wt. of animal) were fatal to mice and rats when injected intramuscularly: III, 0.000055; V and X, 0.00025; VI, 0.001; VIII, 0.0025; IX and XI, 0.35. All compds. stopped cholinesterase activity in rat brain, III being the most active and approaching parathion in effectiveness. J. R. Spencer...

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POL.

Organophosphorus compounds of sulfur and selenium. II. Synthesis of tetraalkylselenopyrophosphates. Jan Michałski and Jan Wiczorkowski (Higher Polytech. School, Łódź, Poland). *Reimer Chem.* 24, 253-8 (1951) (English summary); cf. C.A. 43, 3756a. Tetraalkylselenopyrophosphate, $S_2P_2(O)(OR)_4$, (I) were prepd. by adding with good stirring 0.1 mole dialkyl chlorophosphate (C.A. 42, 2346c) to 0.1 mole of dried and powd. $(EtO)_2P(O)SeNa$ (cf. Pocz. C.A. 42, 2537c) in 100 ml. boiling anhyd. ether (Hg-sealed stirrer, drying tube). The mixt. was refluxed 90 min., dild. with 50 ml. CH_2 in a separatory funnel, washed with 50 ml. water, the top layer washed with 5% $NaHCO_3$ (about 50 ml.), H_2O , and dried over Na_2SO_4 . Reaction products were distd. *in vacuo* after removing the solvents *in vacuo*. The following esters were prepd. (alkyls, % yield b.p. (uncor.), n_D^{20} , n_D^{25} , and d_4^{20} given): tetra-Et (II), 68, b.p. 107°, 1.4333, 1.4318, 1.3403; tetra-Pr, 79, b.p. 100-7°, 1.4670; 1.4643, 1.2086; tetra-iso-Pr, 45, b.p. 93°, 1.4510, 1.4490, 1.1070; tetra-Bu, 80, b.p. 121° (with partial decompn.), 1.4658, 1.4540, 1.1398; di-Et di-Pr (from $ClPO(OEt)_2$ and $(PrO)_2P(O)SeNa$), 80, b.p. 111-12°, 1.4482, 1.4468, 1.2056. Prepn. of the tetra-Me ester was unsuccessful. I possess unpleasant odors, decomp. above 150°, are sparingly sol. in H_2O and easily sol. in organic solvents, and are less susceptible to hydrolysis than the corresponding O-derivs. I with concd. H_2SO_4 ppts. Se; they react with $AgNO_3$ and $HgCl_2$. The proposed structure requires further confirmation. II exhibits anticholinesterase activity.

Adam Sporyński

WIELKOCZASNY, JAN

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Reaction of free thiocyanogen with dialkyl phosphites.
Jan Michalski and Jan Wierzbicki (Inst. Technol.,
Lodz, Poland). *Reactive Compounds* (Engl. transl.
summary). The reaction between free thiocyanogen and
dialkyl phosphites is suggested to be $(RO)_2P(O)H + (SCN)_2$
→ $(RO)_2P(O)(CNS) + HSCN$. Two possible struc-
tures (I) and (II) for I are observed. *MR* is in better accord with
I to give dialkyl phosphorothioamides.
Morris Eisenberg

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Abs Jour: Ref Zhur-Khin., No 13, 1958, 43439.

Author : Michalski J., ~~Wieczorkowski J.~~

Inst : Polish Academy of Sciences.

Title : The Action of Free Thiocyanogen, Diacyl Disulfides,
Bis-(Dialkoxyposphinyl) Disulfides on Esters of
Acids of Trivalent Phosphorus.

Orig Pub: Lull. Acad. polon. sci., 1957, cl. 3, 5, No 9, 917-921.

Abstract: Investigation of the reactions of $(C_2H_5O)_3P$ (I),
 $(C_4H_9O)_3P$ (II), $(C_6H_5O)_3P$ (III) and $C_6H_5P(OC_2H_5)_2$
(IV) with $(SCN)_2$ (V), $(CH_3COS)_2$ (VI), $[C_2H_5O]_2$
 $P(O)S_2$ (VII) and $C_4H_9SSP(O)(OC_2H_5)_2$ (VIII).
Listing initial substances, reaction products,
yield in %, BP in °C/mm (in parentheses temperature
in °C): I and V, $(C_2H_5O)_3PS$ (IX), 62, 93.5/13.

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Abs Jour: Ref Zhur-Khim., No 13, 1958, 43439.

1.4486 (20); II and V, $(C_2H_5O)_3PS$, 42, 104/0.6, 156-157/11, 1.4497 (20); I and VI, IX, 96, and $(CH_3CO)_3S$, 97, 50/12, 61-62/20, 1.4820 (21); III and VII, $(C_2H_5O)_3PS$, 89, 148-150/0.1, —, MP 48°, and $(C_2H_5O)_4P_2O_5S$ (X), 77, 82-84/0.04, 1.4502 (25); I and VII, X, 75, $(C_2H_5O)_4P(O)SC_2H_5$ (XI), 31, 112/11, 1.4570 (20), and IX, 37; I and VIII, $C_4H_9SP(O)(OC_2H_5)_2$, 95, 131-133/11, 1.4580 (20), XI, 41; and IX, 36; IV and VII, $C_6H_5(C_2H_5O)_3P_2O_5S$, 81, 117-118/0.05, 112/0.03, 1.5065 (20), d₄²⁰ 1.2050; XI, 34, IX, 37. The assumption is made of an intermediate formation of the unstable $[RO(R')P^+(SX)(OR)S-Y]$, wherein R = alkyl or aryl, R' = alkoxyl, aryl or phenoxyl, X = CN, CH_3CO , $(C_2H_5O)_2P(O)$, C_4H_9 , Y = CN, CH_3CO , $(C_2H_5O)_2P(O)$. The complex decomposes

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Abs Jour: Ref Zhur-Khim., No 13, 1958, 43439.

either into $RO(R')P(S)OR + XSY$, or $RO(R')P(O)SX + RSY$. Stability of the bonds decreases in the order:
 $ArO > RS > RO > P(O)S > RCOS, NCS$.

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G

Abs Jour: Ref. Zhur-Khimiya, No 19, 1958, 64543.

Author : Michalski, Jan; Wieczorkowski, Jan

Inst :

Title : Phosphoroorganic Derivatives of Sulfur and Selenium.
V. The Action of Thiocyanogen on Dialkylphosphites
and Thiophosphites. Dialkyl Isothiocyanophosphates
and Isothiocyanophosphates.

Orig Pub: Roczn. chem. 1957, 31, No 2, 585-600.

Abstract: The action of thiocyanogen (I) on $(RO)_2POH$ (II)
or $(RO)_2PSH$ (III) produces HSCN and, with a yield of
70-80%, $(RO)_2P(Z)NCS$ (IV), where $Z = O$ (IVa), or S (IVb).
(IVa) and (IVb) can also be derived by the action of
KCNS on $(RO)_2P(O)Et$ or $(RO)_2P(S)Cl$. Upon hydrolysis
of (IVa), HSCN is produced, as well as $(RO)_2P(O)OH$;

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Abs Jour: Ref. Zhur-Khimiya, No 19, 1958, 64543.

upon the reaction of (IVa) with dimethylamine, there are produced $(RO)_2P(O)N(CH_3)_2$ (V) and $(CH_3)_2NH.HSCN$ (VI). Upon the reaction of (IVa) with primary amines, there is produced the thiourea $(RO)_2P(O)NHC(S)NHR'$ (VII). (VIb) hydrolyzes with more difficulty. Upon its reaction with amines, there is produced $(RO)_2P(S)NHC(S)NHR'$ (VIII). To the solution of 27.6 g (II) ($R=C_2H_5$) in 100 ml. C_6H_6 , there is gradually added at 50° a solution of 0.25 moles of (I) in C_6H_6 . Stir for an hour, then after 24 hours there can be separated (IVa) ($R=C_2H_5$) (here and later in the report, yields are given in %, and b.p. in $^\circ C/mm$, N^{20}_D , d_4^{20}): 80, 64-65/0.6, 1.4791, 1.1870. Similarly derived is (IVb) where $R = C_3H_7$, 74, 72-73/0.2, 1.4751, 1.1213; (IVa) ($R = iso-C_3H_7$), 77, 63-64/0.2, 1.4690, 1.1076; (IVa) ($R = C_4H_9$) 88, 86-87/0.12, 1.4718, 1.0757. To a solution

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Abs Jour: Ref. Zhur-Khimiya, No 19, 1958, 64543.

of 0.4 moles of (I) in 500 ml C_6H_6 , the gradual addition during 50 hours at 0° of a solution of 46.2 g of (III) ($R = C_2H_5$) in 100 ml. C_6H_6 , followed by centrifuging and distilling the product, gives (IVb) ($R = C_2H_5$), 73, 73-74/0.6, 1.5220, 1.1906. Similarly, with (IVb) ($R = C_4H_9$), 72, 109/0.7, 1.5088, 1.0981. To a solution of 9.7 g. of KCNS in 150 ml. of acetone, is added 17.3 g. $(C_2H_5O)P(O)Cl$ (IX), and from the filtrate is extracted (IVa) ($R = C_2H_5$), yield 56%; in the presence of acetone, yield 66%. By the same method, yields are: (IVa) ($R = C_4H_9$), 57%, (IVb) ($R = C_2H_5$) 60%, (IVb) ($R = C_4H_9$) 62%. From 32.5 g. $(C_3H_7O)_2P(S)Cl$ and a solution of 14.6 g. KCSN in 200 ml of acetonitrile, there is produced (IVb) ($R = C_3H_7$), 68. 99-102/1.8, 1.5120, 1.1275. To a solution of 14.7 g. (IVa) ($R = C_2H_5$) in 50 ml C_6H_6 ,

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Abs Jour: Ref. Zhur-Khimiya, No 19, 1958, 64543.

there is gradually added a solution of 7 g. dimethyl-
amine in 150 ml C_6H_6 , during 24 hours. There is liber-
ated 4.5 g of (VI), m.p. 112° ; from the filtrate can be
drawn (V) ($R=C_2H_5$), 67, 98/21, 1.4191, -. To a solution
of 17.2 g. (IX) in 50 ml C_6H_6 , there is added gradually
10 g. dimethylamine in 200 ml C_6H_6 at $10-12^\circ$, yield of
(V) ($R=C_2H_5$) 78%. To a solution of 3.9 g. (IVa) ($R=C_2H_5$)
in 40 ml ligroin are added 2.15 g benzylamine in ligroin.
The remainder, after driving off the ligroin, is dis-
solved in C_6H_6 and washed with 15 ml 4% HCl, 5% $NaHCO_3$,
and water, yielded (VII) ($R=C_2H_5$), $R' = C_2H_5CH_2$) 81%,
m.p. 89° (in cyclohexane). Similarly derived is (VII)
($R = C_2H_5$) $R' =$ cyclohexyl), yield 75%, m.p. 85° (in
cyclohexane). To a solution of 4.47 g. (IVa) ($R=iso-$
 C_3H_7) in 30 ml ligroin, there is added a solution of

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Abs Jour: Ref. Zhur-Khimiya, No 19, 1958, 64543.

2 g. cyclohexamine in 10 ml. ligroin, yielding (VII) ($R=\text{iso-C}_3\text{H}_7$, $R'=\text{cyclohexyl}$) 92%, m.p. 106° (in cyclohexane). To a solution of 2.11 g. (IVb) ($R=\text{C}_2\text{H}_5$) in 4 ml. ligroin, there is added 1 g benzylamine in 5 ml ligroin, yielding (VIII) ($R=\text{C}_2\text{H}_5$, $R'=\text{C}_6\text{H}_5\text{CH}_2$) 88%, m.p. 78° (in ligroin or hexane). To a solution of 3.16 g. (IVb) ($R=\text{C}_2\text{H}_5$) in 40 ml n-hexane, there is added 1.5 g. cyclohexylamine in 10 ml. n. hexane, yielding (VIII) 86%, m.p. 55° (in ligroin). For previous report, see RZhKhim, 1957, 73718.

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Abs Jour: Ref Zhur-Khim., No 24, 1958, 81722.

Author : Michalski J., Strzelecka H., Wieczorkowski J.

Inst :

Title : The Phosphororganic Compounds Containing Sulfur and Selenium. VI Amido Esters and Amides of Isothiocyanophosphoric and Isothiocyanothiophosphoric Acids.

Orig Pub: Roczn. chem., 1957, 31, No 3, 879-891.

Abstract: By the reaction of KCNS on $(RO)(R'_2N)P(O)Cl$ (I) (here and further $aR' = CH_3$, $bR' = C_2O_5$ [sic]), $(RO)(R'_2N)P(S)Cl$ II, $(R'_2N)_2P(O)Cl$ and $(R'_2N)_2P(S)Cl$, were obtained the corresponding products by substituting chlorine for the NCS group (III-VI). The structure of III-VI was verified by the synthesis of addition compounds of amines. III, especially with

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Abs Jour: Ref Zhur-Khim, no 24, 1958, 81722

a large R, are not stable, and decompose on
 $(R'_2NPOCl_2)_n$ and $RSCN$. By the action of $RONa$ on
 R'_2NPOCl_2 , or by the reaction of R'_2NH with
 $ROPOCl_2$, the following I were synthesized (here and
 further for describing the products are given R, yield
 in %, b.p. in °C./mm. n_D^{20} , D_4^{20}): I-a, C_8H_7 , 72, -,
 1.4381, 1.1432; I-a, C_4H_9 , 69, 82-84/1, 1.4408, 1.0926;
 I-b, C_4H_9 , -, 96/1.3, 1.4436 (26°), -. In the same
 way was obtained II-a, C_2H_5 , 66, 46.5-47.5/0.4, 1.4947,
 -. To the solution of 0.14 moles of KCN in 200 ml
 of CH_3CN , 0.14 moles of I-a is added, after one hour
 CH_3CN is distilled under vacuum, 100 ml of benzene
 is added, from the filtrate III-a was separated,
 C_2H_5 , 35, 59-61/0.12, 1.4930, 1.1529. In the same

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way when acetone was used as the solvent, there were obtained III-a, C_8H_7 , 39, 69-72/0.18, 1.4942, -; IV-a, C_8H_5 , 57, 52-54/0.05, 1.5463, 1.1714; V-a, 77, 101.5-102/1(83-85/0.3), 1.5300, 1.1526; V-b, 80, 73-74/0.01 (82-84/0.1), 1.5010, 1.0697; VI-a, 63, 66-67/0.2, 1.5734, 1.1694. Upon obtaining III-b ($R = C_4H_9$) in hexane, one equivalent of $C_2H_5NH_2$ in hexane is added to the reaction mixture, the $(C_2H_5)_2N(C_4H_9)P(O)NHCSNHC_6H_5$ was separated, yield 85%, m.p. 109-110°C. (from hexane). To the solution of 0.02 moles of V-a in 20 ml ligroin, 0.02 moles of cyclohexamine is added, yield of the $[(CH_2)_5N]_2P(O)NHCSNHC_6H_5$, 68%, m.p. 122°C. (from C_6H_6). In the same way were obtained (is given: yield in % and m.p. in °C.): $[(C_2H_5)_2N]_2P(O)NHCSNHC_6H_5$, 93, 121.5-122; $(CH_3)_2N(C_2H_5O)P(S)NHCSNHC_6H_5$,

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84, 125-126; $\overline{[(CH_2)_4N]}_2$, P(S)NHCSNHC₆H₁₁, 78, 130.
Communication V, see R. Zh. Khim., 1958, 64543.

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Wieczorkowski, JAN.

Reactions of alkyl alkanethiosulfonates with trialkyl phosphites. A new synthesis of *O,O,S*-trialkyl thiophosphates and esters of alkanesulfonic acids. Jan Michalski, Jan Wieczorkowski, and Tomasz Modro (Politech., Lodz, Poland). *Roczniki Chem.* 32, 1409-11 (1958) (in English). — Et butanethiosulfonate was treated with tri-Bu phosphite (1:1) at 20-5°. The products were distd. in vacuo to yield 89% *O,O*-di-Bu *S*-ethylthiophosphate (I), *b*_p 87-9°, *n*_D 1.4624, and 90% Bu butanesulfonate (II), *b*_p 52-4°, *n*_D 1.4444. The structure of I was confirmed by reaction with Cl in aq. soln. to give ethanesulfonyl chloride, which was transformed into ethanesulfonyl *p*-toluidide, *m*. 79-80°. III was hydrolyzed in 1.4*N* alc. aq. 1.4*N* to Na butanesulfinate. The later was condensed with 2,4-dinitrochlorobenzene to Bu 2,4-dinitrophenyl sulfone, *m*. 91-2°. The reaction between I and tri-Et phosphite was carried out in an analogous way. Fractional distn. of the products gave 3 fractions: an azeotropic mixt., 83% Et butanesulfinate (IV), and 17% *O,O,S*-tri-Et thiophosphate (V), *b*_p 80-83°, *n*_D 1.4385, and *b*_p 115°, *n*_D 1.4672. The last fraction was crystd. to give Bu Et sulfone (VI), *m*. 49-50°. Taking into account the azeotrope, the over-all yields of IV, V, and VI were 67, 89 and 9%, resp. The reaction schemes are given. A. Kreglewski.

2m a
4E2c ij
4E3 d
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Reactions of organic disulfides with dialkyl phosphites, dialkyl thiophosphites and sodium derivatives. A new synthesis of *O,O,S*-trialkyl thiophosphates, *O,O,S*-trialkyl dithiophosphates and *O,S*-dialkyl hydrogen phosphorothiolates. Jan Michalski, Jan Wiczorkowski, Jan Wasiak, and Bożena Plińska (Politechnika Łódź, Poland). *Roczniki Chem.* 33, 247-50 (1959) (In English).—The reactions between acyl disulfides (I) and dialkyl phosphites (II), dialkyl thiophosphites (III), or their Na derivs. (IV) and (V), resp., have been studied (b.p./mm. and *n*_D²⁰ given for the compds. below). II react spontaneously only with I to give (RO)₂P(S)OP(O)(OR)₂ (R = Et), 78-80°/0.03, 1.4453, and (RO)₂PSOH (R = Et), 62-3°/0.03, 1.4644, in 70% yield. IV react with I in C₆H₆ at 20° as well as with diaryl or dialkyl disulfides (VI), R'SSR', to yield (RO)₂P(O)SR' (R = Et, R' = Bu; 135-6°/13, 1.4687; R = Et, R' = Ph, 115-16°/0.6, 1.5248; and R'SNa. An analogous reaction takes place between V and VI giving 64% *O,O*-diethyl *S*-butyl dithiophosphate, 145°/12, 1.4961. An ionic mechanism is suggested for this reaction. The reaction between IV and VI in boiling C₆H₆ led to secondary dealkylation due to nucleophilic attack of an anion contg. S, which gave R'SP(O)(OR)ONa (VII) and R'SR. VII are characterized as cyclohexylamine salts: R = Et, R' = Bu, m. 125-6°; R = Et, R' = Ph, m. 130-1°. The yields of VII were 60-70%.
A. Kreglewski

2 May
4E20 gj
4E32
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Distr: 4E2c(j)/4E3d

Organophosphorus compounds of sulfur and selenium.
XV. Reactions of organic thiosulfonates with trialkyl phosphites and dialkyl phosphites. Jan Michalski, T. Modro, and J. Wieczorkowski (Inst. Technol., Lodz, Poland). *J. Chem. Soc.* 1960, 1888-70; cf. *CA* 54, 14095d.

—BuSO₂Et (I) (27.3 g.) treated with 37.5 g. (BuO)₃P at 20-5° gave 24 g. BuSOOBu, b_p 52-4°, n_D²⁰ 1.4444, and 33.7 g. O,O-dibutyl S-ethyl phosphorothiolate (II), b_p 87-9°, n_D²⁰ 1.4624°. Similarly, 36.4 g. I with 33.2 g. (EtO)₃P gave 13.6 g. mixt. 83% BuSOEt and 17% O,O,S-triethyl phosphorothiolate (III), 16.2 g. III, b_p 115°, n_D²⁰ 1.4672, and 2.1 g. BuSO₂Et, m. 49-50°. PhSO₂Et (IV) (20.3 g.) with 16.6 g. (EtO)₃P gave 68% III and 74% PhSOEt obtained as an azeotrope. Similarly, IV with (BuO)₃P gave II and PhSO₂OBu as the azeotrope, b_p 95-6°. I with (PhO)₃P gave no reaction. (EtO)₃P (33.2 g.) added to 25 g. PhSO₂Ph (V) in 80 ml. C₆H₆ gave 16.8 g. (EtO)₃P, b_p 101°, 5.0 g. PhSOEt, b_p 58°, n_D²⁰ 1.5308, 17.5 g. O,O-diethyl S-phenyl phosphorothiolate (VI), b_p 87-8°, n_D²⁰ 1.5250, and 2 g. (PhS)₂, m. 59°. I (27.3 g.) was added to 3.4 g. Na and 20.7 g. (EtO)₃POH in 160 ml. C₆H₆ at 25-30°, then the mixt. extd. with 3 × 50 ml. H₂O. Distn. of the C₆H₆ soln. gave 24.5 g. III. Concn. of the aq. soln. gave 11.6 g. BuSOONa (VII), identified by conversion to n-butyl 2,4-dinitrophenyl sulfone, m. 89°. Similarly, I with (BuO)₃PONa gave 80% II and 86% VII. IV with (EtO)₃PONa gave 71% III and 86% PhSOONa (VIII), identified by conversion to phenyl 2,4-dinitrophenyl sulfone, m. 157°, and V with (EtO)₃PONa gave 69% VI and 92% VIII. (EtO)₃P (16.6

g.) refluxed 2 hrs. with 16.4 g. S-ethyl sodium thiosulfate (IX) in 70 ml. C₆H₆ gave no reaction. Similarly, IX and (EtO)₃P 2 hrs. at 110-20° gave no reaction. (EtO)₃PONa (0.15 mole) in 100 ml. EtOH added to 24.6 g. IX in 100 ml. EtOH at 20° gave 3.2 g. III. J. A. Giles—

6
1-BN(BW)
2-JAS(NB)(maj)
1-RBW
2

WIECZOROWSKI, Kazimierz

Selection of the cutting conditions in machining gears. Mechanika
Poznan no. 4:93-119 '62.

WIECZOROWSKI, Kazimierz, dr inz.

Studies on the durability and wear of pinion cutters with
straight teeth for machining gears. Przegl mech 24 no.5:
151 10 Mr '65.

1. Department of Metal Machining of the Warsaw Technical
University.

DZIEKONSKI, J.; KRZYWOSZYNSKI, W.; STEFFEN, J.; WIECZOROWSKI, St.,

Statistical data on trichomoniasis in bulls in Poland. Wiadomosci parazyt.
Warsz. 4 no.4:319-322 1958.

(TRICHOMONIASIS, epidemiol.
in bulls in Poland (Pol))

POLAND

WIECZOROWSKI, Stefan.

1. Department of Parasitology, Agricultural University College, Lublin; 2. Military Department of Veterinary Hygiene (Woj. Zaklad Higieny Weterynaryjnej), Bialystok.

Warsaw, Acta Parasitologica Polonica, Fasc 15, 30 June 1965, pp 141-150

"Studies on immunity phenomena in guinea pigs infected with Dictyocaulus filaria."

WIECZORKIEWICZ, Tadeusz; DAVIDOWICZ, Aleksander; SYMONOWICZ, Norbert.

Results of the prednisone--glucose test in mothers giving birth to giant fetuses. Ginek. Pol. 35 no.6:777-787 N-D '64

1. Z Kliniki Polecznictwa i Chorob Kobietych Wojskowej Akademii Medycznej w Lodzi; z Kliniki Zdrowego Czlowieka Instytutu Medycyny, otoczonej i z laboratorium Centralnego Szpitala Klinicznego Wojskowej Akademii Medycznej w Lodzi.

ACCESSION NR: AP4044126

P/0015/64/000/008/0197/0199

AUTHOR: Zawadzki, Antoni; Wieczorkowski, Zbigniew

TITLE: Problems of glass silk technology

SOURCE: Szkło i ceramika, no. 8, 1964, 197-199

TOPIC TAGS: glass cloth, glass fabric, glass fiber, fiberglass, glass silk, synthetic fiber, conference

ABSTRACT: The third international colloquium on fiberglass, organized by the Drezno Institute of Fiber Technology under the German Academy of Sciences, was held in October 16-18, 1963. The program included three groups of problems: 1) obtaining fiber-producing glass; 2) glass silk manufacture (properties of glass silk, test methods); and 3) finishing glass silk fabrics for reinforced plastics, and special problems concerning materials reinforced by fiberglass. The data presented at the colloquium indicate that the GDR and the Czechoslovak Socialist Republic devote much attention to finishing fabrics for reinforcing plastic materials and have set up machinery for the manufacture of "crown" glass fabrics. The Czechoslovak Socialist Republic is investing money in a new

Cord 1/2

ACCESSION NR: AP4044126

plant for the manufacture of fiberglass by continuous methods with a capacity that is two times higher than that of the existing plants. The GDR will erect a silk glass manufacturing plant capable of exceeding the silk glass output of the Czechoslovak Socialist Republic. Poland lacks the capacity of manufacturing "crown" glass fabrics for the reinforcement of plastics, or for decoration and filtration purposes. It is suggested that the Institute of Synthetic Fibers in Lodz establish direct cooperation with the Fiberglass Institute in Moscow and remedy the situation.

ASSOCIATION: Instytut Wlókien Sztucznych i Syntetycznych, Lodz (Institute of Synthetic Fibers)

SUBMITTED: 00

ENCL: 00

SUB CODE: MT

NO REF SOV: 000

OTHER: 000

Card 2/2

Wieczysty, A.

Determining the permeability coefficient on the basis of water elevation in shaft wells.

p. 108

GOSPODARKA WODNA. Warszawa, Poland. Vol. 18, no. 3, 1958

Monthly List of East European Accessions, (EEAI) LC, Vol. 9, No. 2, Feb. 1960

Uncl.

NIEDZIELSKI, Henryk; WIECZYSTY, Artur; KLINSKI, Tadeusz

The need for unification of hydrogeological methods of documentation. Przegl geolog 10 no.7:354-357 J1 '62.

1. Hydrologiczny Instytut, Politechnika, Krakow (for Niedzielski and Wieczysty). 2. Dyrektor Departamentu Hydrogeologii, Centralny Urzad Geologii, Warszawa (for Klinski).

NIEDZIELSKI, Henryk, mgr inż.; WIECZYSTY, Artur, dr inż.

Results of experimental studies on wells with horizontal drain tiles.
Gosp wodna 22 no.11:490-494 N '62.

1. Hydrogeo, Krakow (for Niedzielski). 2. Politechnika, Krakow (for
Wieczysty).

WIEDELSKY, Konrad, inz.

The magic disc. Horyz techn 17 no.3:13-15 Mr '64.

Wieder, N.

(C) Reduction in coal gas of high-iron and high-silica bauxite of Bóbc, Hungary. Magnetic separation of red mud obtained by the Bayer method. Z. Horváth, N. Wieder, and A. Horváth (Tech. Univ., Miskolc, Hung.). *Acta Tech. Acad. Sci. Hung.* 11, 383-404(1955). The bauxite contained Al_2O_3 53.00; SiO_2 8.31; Fe_2O_3 21.80; TiO_2 3.70; and CaO 0.45%. A no. of expts. revealed that reduction of the moist ore at 370° for 3 hrs. in an atm. of coal gas gave the best sepn. step. Data covering ranges of 300° to 450° and 1 to 3 hrs. are tabulated. The ore was reduced at nut size in a lab. rotary kiln; subsequently cooled in a coal gas atm., finely ground, and leached with sufficient 40% Be NaOH to provide 1.8 moles of Na_2O for each mole of Al_2O_3 . Ground pulp was autoclaved at 6 atm. for 3 hrs., dild. to 30% Be , and sepd. into fractions by magnetic sepn. The highly magnetic fraction contg. most of the Fe_2O_3 of the red mud can be agglomerated and fed to the blast furnace; the remainder is processed pyrogenically for Al_2O_3 recovery.

W. L. Cheesman

(2)

Wieder, N.
Hungary /Chemical Technology. Chemical Products
and Their Application

I-6

Mineral salts. Oxides. Acids. Bases.

Abs Jour: Referat Zhur - Khimiya, No 9, 1957, 31246

Author : Horvath Z., Wieder N., Horvath A.

Inst : Hungarian Academy of Sciences

Title : Reduction in Coal Gas of High-Iron and High-Silica Bauxite of Szoc (Hungary). Magnetic Separation of Red Mud Obtained by Bayer Method.

Orig Pub: Acta Techn. Acad. sci. hung., 1955, 11, No 3-4, 363-404

Abstract: In the method that is proposed, in lieu of drying of the bauxite, use is made of a reducing firing

Card 1/3

Hungary /Chemical Technology. Chemical Products
and Their Application

I-6

Mineral salts. Oxides. Acids. Bases.

Abs Jour: Referat Zhur - Khimiya, No 9, 1957, 312⁴⁶

with subsequent decomposition of the product by the method of Bayer. Separation of red mud from aluminate solution is effected in a magnetic field of varying intensity. The object of the study were bauxites containing (in %): 6.31 SiO_2 and 21.60 Fe_2O_3 , and having a modulus of 8.4. Optimal conditions of firing: maintaining at 370° for 3 hours. Advantages of this method are simplification of the process of red mud separation and also a high degree of utilization of Fe_2O_3 and Al_2O_3 contained in the bauxite. The strongly magnetic portion of the mud (amounting to 40-50% of its weight) containing 70-72% Fe_2O_3 , can be utilized as raw material of blast furnace

Card 2/3

Hungary /Chemical Technology. Chemical Products
and Their Application

I-6

Mineral salts. Oxides. Acids. Bases.

Abs Jour: Referat Zhur - Khimiya, No 9, 1957, 31246

smelting; from the low magnetic portion of the mud, containing (in %): 20-21 Al_2O_3 and about 6.5 Na_2O , can be recovered, by means of a pyrogenic process, a considerable portion of these oxides. The proposed procedure permits a recovery (in %) of: 92.5 Al_2O_3 and 54 Fe_2O_3 .

Card 3/3

11/04* Extraction of Iron from Bauxite by Hydrometallurgy
Bauxitok vastalatásának hidrometallurgiai úton. (Hungarian.)
Zoltán Horváth and Nándor Winkler. *Kutatói Lapok*, v. 9,
no. 4, Apr. 1956, p. 179-182.
Suggestion of method; economic and technical advantages.
ELASHU

WIEDER, N.; HORVATH, Z.

Hydrometallurgic method for the removal of iron from bauxite. p. 179 (Kohaszati
Lapok. Budapest Vol. 11, no. 4, Apr. 1956)

SO: Monthly List of East European Accessions (EEAL) LC., Vol. 6, no. 7, July 1957 Uncl.

WIEDER, Nandor, okleveles kohomernok

Data on the development of a method for processing carbonate manganese ore of Urkut. (To be contd.). Koh lap 95 no.11:196-501 N '62.

1. NME Fémkohászati Tanszék.

WIEDER, Nandor, okleveles kohomernok

Data on the development of processing the Urkut carbonate,
manganese ore. (Continuation). Koh lap 95 no.12:552-558
D '62.

1. Behezipari Muszaki Egyetem Fémkohászati Tanszek.

WIEDER, Nandor, oklevelez kohomernok

Preparation of electrolytic manganese in the U.S.A. and possibilities
for its production in Hungary. Koh lap. 98 no.3:114-120 Mr '65.

RUMANIA/Chemical Technology - Chemical Products and Their: H-33
Application. Cellulose and Its Production. Paper.

Abs Jour : Ref Zhur - Khimiya, No 17, 1958, 59532

Author : Wiedermann, A.

Inst :

Title : Semi-Plant Experiments for the Production of Semi-
Cellulose from Reed by a Continuous Soda Method.

Orig Pub : Celuloza si hirtie, 1958, 7, No 2, 56-63

Abstract : Results are described of experiments with continuous semi-
chemical boiling of semi-cellulose from reed in a semi-
plant apparatus. An analysis is given of the conditions
of boiling; more precise technological indices of the
process, and the mechanical characteristics of the semi-
cellulose obtained, are cited.

Card 1/1

- 103 -

WIEDEMANN, A.

The neurohormonal system of the skin. Borgyogy. vensr. szemle
39 no.6:241-245 D '63.

1. II sz. Egyetemi Borklinika (Igazgato: Prof. dr. A. Wiedemann)
Wien.

(SKIN) (SYMPATHETIC NERVOUS SYSTEM)
(PARASYMPATHETIC NERVOUS SYSTEM)
(PHYSIOLOGY) (NOREPINEPHRINE)
(HISTAMINE)

WIEDERMANN, Boleslav; DELONG, Vladislav.

Porphyria; acute and mixed forms, clinical aspects. Cas lek cs 93
no.17:451-457 Ap '54. (WEAL 3:7)

1. Z I. interni kliniky z Ustavu pathologicke anatomie PU v
Olomouci.

(PORPHYRIA,

*acute & mixed forms, clin. aspects)

WIEDERMANN, B.

DELONG, Vladislav; WIEDERMANN, Boleslav.

Porphyrria; acute and mixed forms, anatomopathological and
laboratory diagnosis. Cas lek cs 93 no.17:457-463 Ap '54.
(REAL 3:7)

1. Z ustavu pathologicke anatomie I. interni kliniky PU v
Olomouci. Prednostove doc Dr C.Dvoracek a prof. Dr J.Blatny.
(PORPHYRIA, diagnosis,
*acute & mixed forms)

WINDERMANN, B., Dr; OSTADALOVA, B., Dr; DOLENEK, A., Dr

Eye manifestations in malignant diseases of the lymphatic system.
Cesk.ofth. 11 no.4-5:341-355 1955.

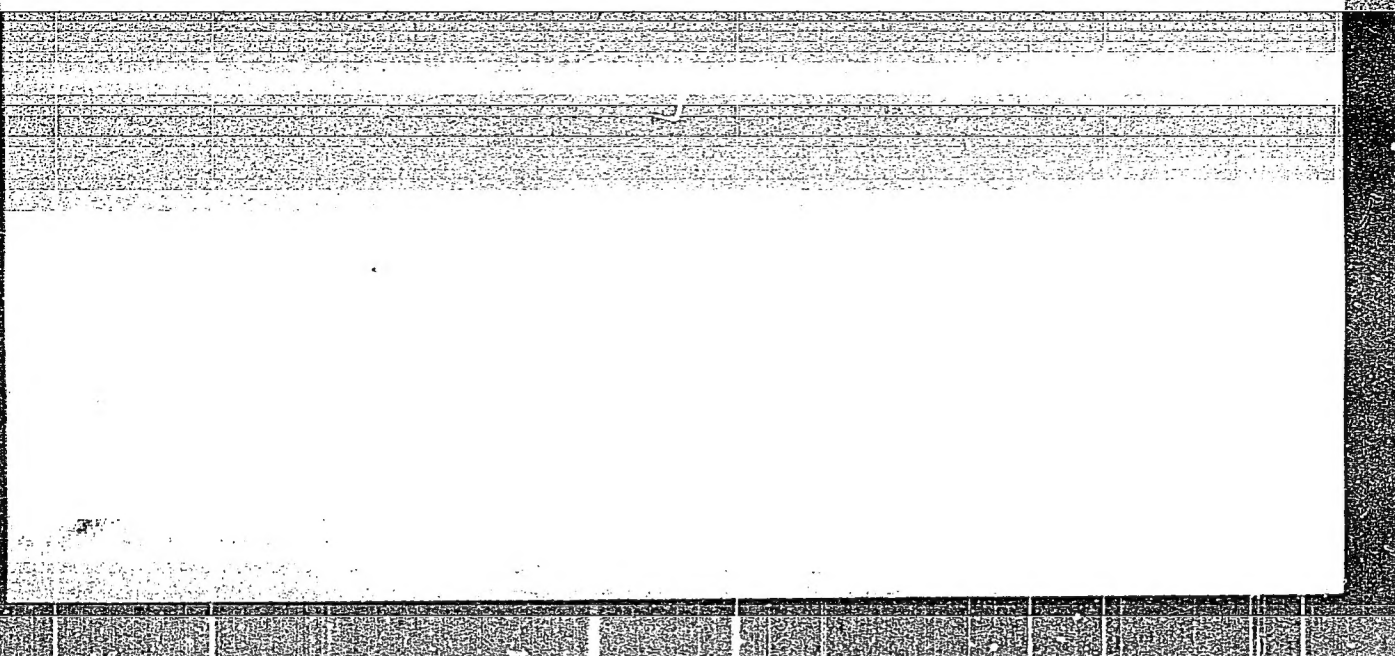
1. Z oční kliniky FÚ v Olomouci, přednosta prof. Dr V.Vejdovsky.
- Z Interní kliniky FÚ v Olomouci, přednosta prof. Dr P.Lukl.

(LYMPHATIC SYSTEM, diseases
ocular manifest.)

(EYE, diseases
in lymphatic system dis.)

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CZECHOSLOVAKIA/General Problems of Pathology. Neoplasms.

U

Abs Jour: Ref Zhur-Biol., No 8, 1958, 37229.

Author : Wiedermann, B.

Inst :

Title : Treatment of Chronic Myelosis with Desacetyl-Methyl-Colchicine (Compound F, Demecolcine, Colchamine, Colcemide)

Orig Pub: Vnitřní lékařství, 1957, 3, No 5, 448-465.

Abstract: Eleven of 18 patients with chronic myeloid leukemia, treated previously with various preparations, showed good therapeutic effects with desacetylcolchicine (I); in the remaining the remission was incomplete and of short duration. I shows a rapid, but controllable, effect on neutropoiesis also in patients not responding to myleran or radiation therapy. The advantage of I

Card : 1/2

VNITŘ KLIN PU, Olomouc,

CZECHOSLOVAKIA/General Problems of Pathology. Neoplasms. U

Abs Jour: Ref Zhur-Biol., No 8, 1958, 37229.

consists in the insignificant damage to the bone marrow, particularly to thrombocytopoiesis. Its disadvantage is in the need of prolonged administration and frequent blood control. The possibility of application of I in the therapy of other malignant hemopathies - cancer, sarcoma and some skin diseases - is considered.

Card : 2/2

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